

State of Alaska
Department of Fish and Game
Nomination for Waters
Important to Anadromous Fish

1985
Year of Revision 85-389

ALASKA DEPT. OF
FISH & GAME

SEP 17 1984

HABITAT
REGIONAL OFFICE

For Office Use

Anadromous Water Catalog Volume 86 REGION IV
USGS Quad ADITARD B-3
Name of Waterway WILLOW CREEK - GEORGE RIVER
Anadromous Water Catalog Number of Waterway 335-20-16600-2741-3212-4030

Change to Atlas
 Catalog
X Both
Addition X
Deletion
Correction

Nomination # <u> </u>	<u>10/16/84</u>
Regional Supervisor <u> </u>	Date <u> </u>
<u> </u>	<u>1/29/84</u>
Drafted <u> </u>	Date <u>10/84</u>

Name addition: GRANITE CREEK HOMESTAKE CREEK
USGS name WILLOW CREEK, GEORGE RIVER
Local name

Species	Date(s) Observed	Spawning	Rearing	Migration
COHO	JUNE 14, 1984		X	
			4031	
add Trib # 335-20-16600-2741-3212-4030				

Comments: Provide any clarifying information, including number of fish observed, location of fish survey data, etc.

Two (2) juvenile coho salmon were electroshocked from each of the following creeks, in the immediate area of their confluence:
GRANITE CREEK, HOMESTAKE CREEK, WILLOW CREEK in the George River drainage. See attached memorandum for supporting documentation.

Attach a copy of a map showing location of mouth and upper points of each species, specific stream reaches identified for spawning or rearing, locations of barriers, such as falls. Attach a copy of the fish survey data, if available.

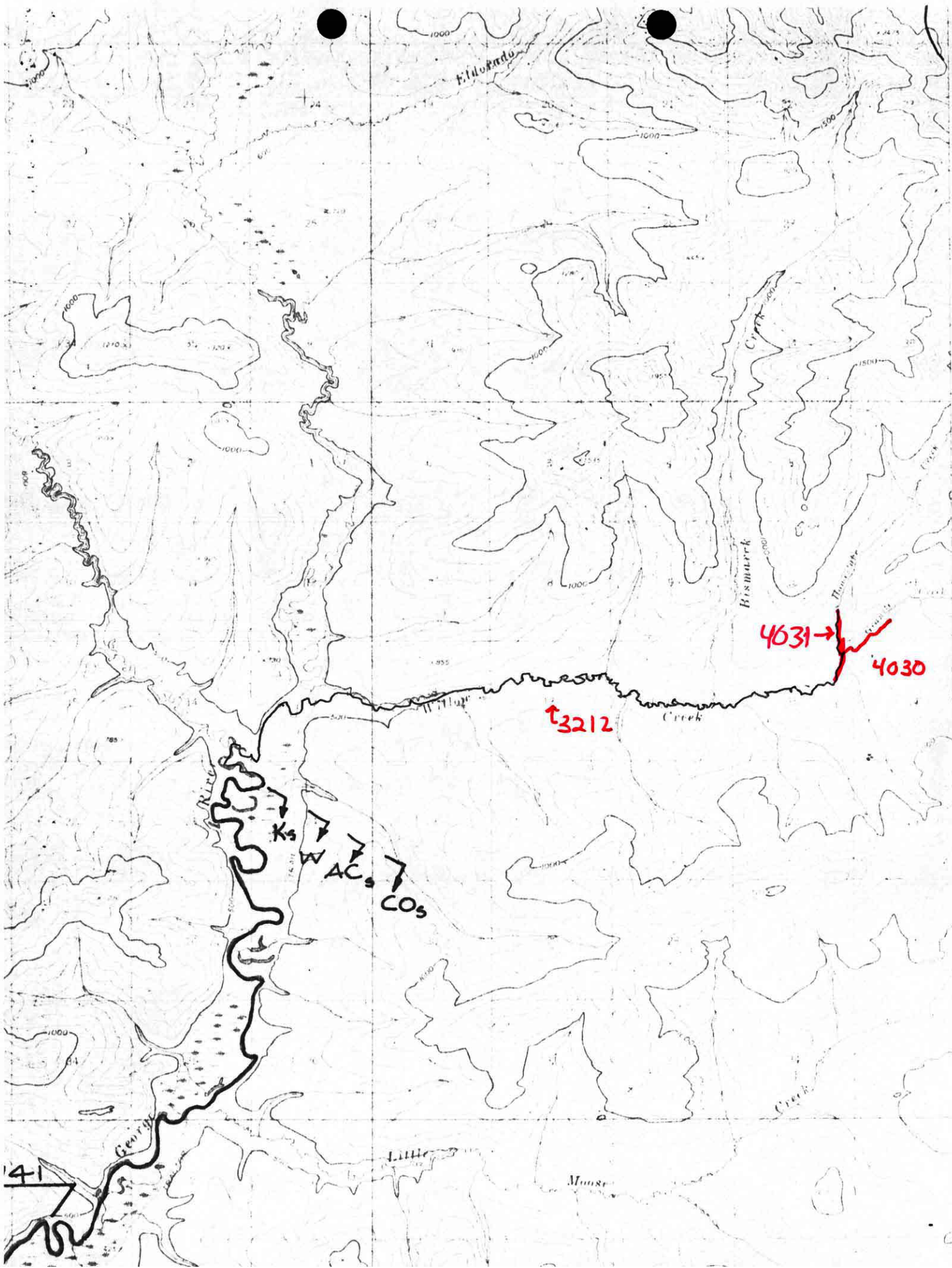
Name of Observer (please print) DENBY S. LLOYD

Date: 17 Sept 84 Signature: D. S. Lloyd D. S. Lloyd

Address: ADF&G HABITAT DIVISION R-IV

333 RASPBERRY ROAD ANCHORAGE, AK. 99502

Signature of Area Biologist:



MEMORANDUM

State of Alaska

TO: The Files

DATE: June 20, 1984

FILE NO:

TELEPHONE NO. 267-2346

FROM: Denby S. Lloyd *DL*
Habitat Biologist
Region IV
Habitat Division
Department of Fish and Game

SUBJECT: Water Quality
Monitoring Trip with
ADEC to Innoko,
Iditarod and George
Rivers

On June 13-14, 1984 Doug Toland and Mary S^rix^k of the Department of Environmental Conservation (DEC) and I toured by helicopter several drainages subject to placer mining in the McGrath area in order to perform a water quality program designed by DEC to gather information on the downstream effects of sedimentation produced by mining. The Department of Fish and Game (ADF&G) provided supplementary funds for the trip in order to sample fish populations in the mine areas. In addition, the Southcentral District Office of DEC provided some funds, and requested us to inspect the source of sediment that was producing turbid water in Lake Creek, a popular sport-fishing stream in the Yentna/Susitna River drainage.

LAKE CREEK, June 13:

We flew up Lake Creek and determined that sediment-laden water was issuing from Home Creek. We continued up Lake Creek and then flew up Camp Creek to Mills Creek, to the mining community of Collinsville. Near the confluence of Twin Creek and Mills Creek a diversion of water had occurred, whether naturally or artificially we could not determine, which caused the discharge to flow overland across a "grassflat" and onto an abandoned airstrip. The airstrip was rapidly eroding, producing considerable amounts of sediment. At the lower end of the runway, the sediment-laden water again flowed overland until discharging into Home Creek. Home Creek was then discolored to the confluence with Lake Creek. Doug Toland took water samples at several points along the "water diversion" into Home Creek. Attached (Attachment 1) is a newspaper article describing the diversion; the picture depicts the abandoned airstrip between Mills Creeks and Home Creek which is apparently producing the sediment seen in Lake Creek.

INNOKO RIVER, June 13:

Independence Creek: We landed at the confluence of Independence Creek and the Innoko River. Doug Toland took

water samples. I electroshocked for approximately two to five minutes at each of two sites:

Innoko River upstream
of Independence Creek

3 sculpins

Independence Creek
above Innoko River

2 sculpins
1 grayling
1 burbot

Ganes Creek: We landed on Ganes Creek, in the Innoko mining district, at a point that we felt was well upstream of current mining activity. As we unloaded our gear we were "buzzed" by a small Piper aircraft (No.: N83362) several times. The aircraft appeared to pass within twenty to thirty feet of us, and on two occasions we believe we were shot upon by a rifle which we believe we saw extending out of the cockpit of the plane. During the "buzzing" Lloyd Magnuson and a companion walked over a hill and told us that we were trespassing, that the owner of the mine was in the plane, and that we must immediately fly to their camp lower down on the drainage.

At the camp we met Warren Magnuson, who made two apparently contradictory statements about the firing:

1. that he would have hit us if he had wanted to, and
2. that we were lucky that his son had left an empty rifle in the plane.

Warren Magnuson said that we were on private property, demanded identification, and told us that if we intended to perform an enforcement action that we would have to produce a search warrant. We produced identification and told him that we simply wanted to take fish and water samples in Ganes Creek upstream and downstream of his mine. He indicated that we had his permission to proceed. During the conversation Mr. Magnuson stated that they have not yet received patent to the claims from the Bureau of Land Management (BLM) but that patent should be issued for at least a portion of them this year. I indicated to Mr. Magnuson that unpatented federal mining claims entitle the holder to mineral rights and the use of the surface resources, but that public access could not be restricted unless it interfered with the mining operation. Both Warren and Lloyd Magnuson indicated that the Mining Law of 1872 clearly allocates a private property right to mineral entrants. We did not pursue the discussion any further.

They further explained that they had brought us into their camp because they feared theft, and had no idea of who we were.

We then flew back upstream in Ganes Creek, to a point approximately within Section 15, T. 32 N., R. 40 W., S.M. Doug Toland took water samples. I electroshocked:

Ganes Creek
above mining operation

5 sculpin
6 coho salmon (approx. 45-50 mm)

The mine on Ganes Creek was not operating while we were present. Warren Magnuson indicated that grayling, trout (Dolly Varden), burbot and salmon occur in Ganes Creek, and that in the fall adult salmon come up into his sluice box. Mr. Magnuson told us that he had no intention of installing settling ponds, which is confirmed by his 1984 Annual Placer Mining Application (APMA 30980, Attachment 2).

Little, Spruce, Ophir, and Beaver Creeks: We flew over these drainages, and took water samples at Ophir and Beaver Creeks. We landed at John O'Carroll's mine on Spruce Creek; he indicated that there are no fish in Spruce Creek, and that adult salmon are known to ascend the Innoko River at least to a point even with the confluence of Yankee Creek.

Roberts Creek: On our return flight to McGrath we stopped at the confluence of Roberts Creek and the upper Innoko River. Doug Toland took water samples. I electroshocked:

Roberts Creek
above Innoko River

3 sculpins
1 Dolly Varden

GEORGE RIVER, June 14:

Willow Creek: We landed at the confluence of Homestake and Granite Creeks in upper Willow Creek, at the new mine site of L.E. Wyrick. Mr. Wyrick was not present, but the creeks had all been dug-up and channelized this year or late last year. The sluice box was not yet assembled. Doug Toland took water samples. I electroshocked:

June 20, 1984

<u>Willow Creek below confluence</u>	<u>Homestake Creek above confluence</u>	<u>Granite Creek above confluence</u>
1 Dolly Varden 2 coho salmon	2 Dolly Varden 2 sculpin 2 coho	1 Dolly Varden 2 coho salmon

Mr. Wyrick had a shaker-table at the mine site.

Julian Creek: We flew down the George River to Julian Creek. The George River was running muddy, apparently due to rains on the previous day. At Julian Creek we noted turbid effluent discharging to the already muddy George River; the Wilmarth mine was not operating at the time. Doug Toland took water samples. I electroshocked:

Julian Creek
above mining operation

No fish

I also took three water samples, and had them analyzed at Chemical & Geological Laboratories of Alaska (Attachment 3):

	Settleable Solids (ml/l/hr)	Turbidity (NTU)
George River upstream	0.15	32
Mouth of Julian Creek	0.80	3,600
George River, 500' downstream	0.15	130

No enforcement action was taken at the Wilmarth mine, even though Julian Creek upstream of the mining operation was running clear. At a turbidity of 130 in the George River I could see less than one-inch into the water.

Spruce Creek: We landed at the mouth of Spruce Creek, approximately two miles downstream from Julian Creek on the George River. L.E. Wyrick had disassembled his mining camp. Doug Toland took water samples.

IDITAROD RIVER, June 14:

Bonanza and Willow Creeks: We flew over mining operations on these creeks. After stopping at the community of Flat, and sampling the mouth of Otter Creek, we returned to the mouth of Willow Creek. Doug Toland took water samples of the apparently naturally muddy creek.

Otter Creek: Doug Toland took water samples on Otter Creek in Flat and at the confluence with the Iditarod River.

June 20, 1984

After stopping at the mouth of Willow Creek we flew up Otter Creek to the confluence of the north fork and the south fork. Doug Toland took water samples. I electroshocked:

North Fork of Otter Creek
above confluence with South Fork

4 sculpin
3 Dolly Varden
3 grayling
2 blackfish
1 coho salmon

SUMMARY:

All fish sampled were brought back to the ADF&G office in Anchorage. Identifications were confirmed by:

Roger Grischkowsky, FRED Division
Joe Sullivan, FRED Division
Kelly Hepler, Sport Fish Division

Results from analysis of DEC water samples will be delivered to ADF&G when completed, and will be appended to this trip report.

Attachments

cc: Al Ott
John Clark